

**AMENDMENTS TO THE CLAIMS**

The following is a complete, marked up listing of revised claims with a status identifier in parentheses, underlined text indicating insertions, and strikethrough and/or double-bracketed text indicating deletions.

**Listing of the Claims**

1-50. (Canceled)

51. (Currently Amended) An optical disc having a data structure for managing reproduction of menu data, comprising:

a video data area storing one or more playback units of video data;

a menu data area storing a menu data file, the menu data file including a plurality of object units for recording thumbnail pictures, each thumbnail picture corresponding to one of the playback units, each thumbnail picture being recorded in one of the object units; and

a menu management area storing menu management information, the menu management information including ~~at least one of first size information and second size information, the first size information indicating an actual data size of each thumbnail picture, the second size information indicating a data size of a data block into which the thumbnail picture is stored,~~ wherein,

~~padding data is recorded between thumbnail pictures, the padding data being recorded based on the first size information and the second size information,~~ and

at least one thumbnail picture in the menu data file is selected based on a user selection and reproduced based on the menu management information,

wherein the selected thumbnail picture includes an intra-coded picture (I-picture) and one or more predictive coded pictures (P-pictures),

wherein the selected thumbnail picture is displayed by sequentially transmitting the I-picture and the P-pictures.

52. (Previously Presented) The optical disc of claim 51, wherein the menu management information includes a starting address and an ending address of each thumbnail picture to indicate the actual data size of each thumbnail picture.

53. (Previously Presented) The optical disc of claim 52, wherein a number of starting and ending address pairs indicates the number of the thumbnail pictures stored in the menu data file.

54. (Currently Amended) A method of reproducing menu data recorded on a computer-readable medium, the method comprising:

reading menu management information, a menu data file, and one or more playback units of video data from the computer-readable medium, the menu data file including a plurality of object units for recording thumbnail pictures, each thumbnail picture corresponding to one of the playback units, each thumbnail picture being recorded in one of the object units, the menu management information including ~~at least one of first size information and second size information, the first size~~ information indicating an actual data size of each thumbnail picture, ~~the second size information indicating a data size of a data block into which the thumbnail picture is~~ stored; and

at least one thumbnail picture[[s]] in the menu data file is selected based on a user selection and reproduced based on the menu management information,

wherein the selected thumbnail picture includes an intra-coded picture (I-picture) and one or more predictive coded pictures (P-pictures),

wherein the selected thumbnail picture is displayed by sequentially transmitting the I-picture and the P-pictures,

wherein data recorded between thumbnail pictures is treated as padding data ~~based on the first size information and the second size information.~~

55. (Previously Presented) The method of claim 54, wherein the menu management information includes a starting address and an ending address of each thumbnail picture to indicate the actual data size of each thumbnail picture.

56. (Previously Presented) The method of claim 55, wherein a number of starting and ending address pairs indicates the number of the thumbnail pictures stored in the menu data file.

57. (Currently Amended) A reproduction apparatus, comprising:  
a reproducing unit configured to read data recorded on a computer-readable recording medium; and  
a controller configured to control the reproducing unit to read menu management information, a menu data file, and one or more playback units of video data from the computer-readable medium, the menu data file including a plurality of object units for recording thumbnail pictures, each thumbnail picture corresponding to one of the playback units, each thumbnail picture being recorded in one of the object units, the menu management information including ~~at least one of first size information and second size information,~~ the first-size information indicating an actual data size of each thumbnail picture, ~~the second size information indicating a data size of a data block into which the thumbnail picture is stored;~~ and

a decoder configured to decode at least one thumbnail picture in the menu data file based on the menu management information,

wherein the controller is configured to select at least one thumbnail picture in the menu data file based on a user selection and configured to reproduce the at least one thumbnail picture based on the menu management information,

wherein the selected thumbnail picture includes an intra-coded picture (I-picture) and one or more predictive coded pictures (P-pictures),

wherein the controller is configured to display the selected thumbnail picture by sequentially transmitting the I-picture and the P-pictures,

wherein data recorded between thumbnail pictures is treated as padding data ~~based on the first size information and the second size information.~~

58. (Previously Presented) The apparatus of claim 57, wherein the controller controls the reproducing unit to read the menu management information including a starting address and an ending address of each thumbnail picture to indicate the actual data size of each thumbnail picture.

59. (Previously Presented) The apparatus of claim 58, wherein a number of starting and ending address pairs indicates the number of the thumbnail pictures stored in the menu data file.

60-65. (Cancelled)

66. (Previously Presented) The optical disc of claim 51, wherein the sequentially transmitting operation is repeated until another thumbnail picture is selected.

67. (Previously Presented) The method of claim 54, wherein the sequentially transmitting operation is repeated until another thumbnail picture is selected.

68. (Previously Presented) The reproduction apparatus of claim 57, wherein the sequentially transmitting operation is repeated until another thumbnail picture is selected.

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**END OF CLAIM LISTING**